

# Trends in Premarital Sex in the United States, 1954–2003

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## SYNOPSIS

**Objectives.** Policy and programmatic efforts promoting sexual abstinence until marriage have increased, but it is unclear whether establishing such behavior as normative is a realistic public health goal. This study examined the proportion of individuals in various cohorts who had had premarital sex (defined as either having had vaginal intercourse before first marrying or ever having had intercourse and never having married) by various ages.

**Methods.** Data from four cycles of the National Survey of Family Growth, 1982–2002, and event history analysis techniques, including Kaplan-Meier life-table procedures and Cox proportional-hazards regression models, were used to examine the incidence of premarital sex by gender and historical cohort.

**Results.** Data from the 2002 survey indicate that by age 20, 77% of respondents had had sex, 75% had had premarital sex, and 12% had married; by age 44, 95% of respondents (94% of women, 96% of men, and 97% of those who had ever had sex) had had premarital sex. Even among those who abstained until at least age 20, 81% had had premarital sex by age 44. Among cohorts of women turning 15 between 1964 and 1993, at least 91% had had premarital sex by age 30. Among those turning 15 between 1954 and 1963, 82% had had premarital sex by age 30, and 88% had done so by age 44.

**Conclusions.** Almost all Americans have sex before marrying. These findings argue for education and interventions that provide the skills and information people need to protect themselves from unintended pregnancy and sexually transmitted diseases once they become sexually active, regardless of marital status.

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Over the past decade, increasing amounts of advocacy, funding, and programmatic effort have focused on encouraging Americans to abstain from sexual intercourse until they marry. The Personal Responsibility and Work Opportunity Reconciliation Act (i.e., welfare reform) enacted in 1996 contained a provision authorizing \$50 million annually in federal funding for abstinence-until-marriage education; programs funded under the act must teach that “abstinence from sexual activity outside marriage [is] the expected standard” of behavior and that “sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects.”<sup>1</sup> State programs funded under this authorization must have as their “exclusive purpose” the promotion of abstinence outside of marriage for people of any age.<sup>2</sup> The current administration recently requested \$204 million for fiscal year 2007 to fund abstinence-only education, and now requires such programs to emphasize “that the best life outcomes are more likely obtained if an individual abstains until marriage” and prohibits them from “promoting or encouraging the use of any type of contraceptives outside of marriage.”<sup>3</sup> Due in part to government support, private advocacy efforts to promote abstinence until marriage are also gaining prominence and political clout.<sup>4</sup>

The primary stated goal of these efforts is to encourage all Americans to abstain from sex until they marry.<sup>5</sup> It follows that such programs consider it an achievable goal to make abstinence until marriage a normative behavior.<sup>6</sup> However, the median age at first marriage increased from 22.1 to 25.8 for women and from 24.4 to 27.4 for men over the past 25 years,<sup>7</sup> and the proportion of the population 18 and older that had never married increased from 16% to 25% between 1970 and 2004,<sup>8,9</sup> suggesting that many individuals have a long interval after puberty and before marrying during which they may become sexually active. The median age at menarche is 12.6 and at spermarche is 14.0,<sup>10</sup> so this interval is now typically about 13 years for both men and women. That 70% of adolescent females and 65% of adolescent males have had sex by age 19<sup>11</sup> and few have married suggests that a large percentage do so before marrying. The first goal of this analysis was to quantify current normative behavior by calculating the proportion of Americans who have had premarital sex.

In addition, public opinion polls over the last 20 years have consistently shown that about 35% of adults say premarital sex is always or almost always wrong. (Unpublished tabulations of data from the General Social Survey, 1982–2004.) In the same vein, there is a common popular perception that most or all of those

who came of age before the “sexual revolution” of the 1960s and 1970s waited until they married to have sex, and that it is necessary to revert to the behaviors of that earlier time in order to eliminate the problems of unintended pregnancy and sexually transmitted diseases. However, research has questioned whether such a chaste period ever existed.<sup>12</sup> The second goal of the analysis was to assess whether the percentage of Americans having premarital sex has changed over time.

Many or most abstinence-until-marriage programmatic efforts are aimed at teens.<sup>13</sup> The U.S. Department of Health and Human Services’ (DHHS’s) Healthy People 2010 goals include the objective of increasing the proportion of *adolescents* who abstain from sexual intercourse or use condoms if sexually active,<sup>14</sup> and DHHS’s parenting skills web site states that “abstaining from sex until . . . a mutually faithful marriage to an uninfected partner is the healthiest choice.”<sup>15</sup> The third goal of this analysis was to assess whether those who abstain from sex at least until the end of their teen years are likely to abstain all the way until marriage.

## METHODS

The primary data sources for this analysis were the four most recent cycles of the National Survey of Family Growth (NSFG), conducted in 1982, 1988, 1995, and 2002. The NSFG is a nationally representative, in-person survey that collects detailed information on individuals’ sexual, marital, contraceptive, and child-bearing behaviors. The 1982, 1988, and 1995 NSFGs all surveyed women aged 15–44; the sample sizes were 7,969 in 1982, 8,450 in 1988, and 10,847 in 1995. The 2002 survey interviewed 7,643 women in this age range, and for the first time a sample of 4,928 men were also surveyed.<sup>16</sup>

I constructed a measure of premarital sex by combining measures of the age (in years and months) at which the respondent first had vaginal sexual intercourse (if the individual had ever had sex) and the age he or she first married (if the individual had ever married). A previously published cross-sectional analysis indicated that in the 2002 NSFG, 85% of *ever-married* women had had sex before they married,<sup>17</sup> but this measure fails to take into account women who had never married but had already had sex. A better methodological approach (used in the current study) is event history analysis, which allows one to take into account the experience of people at all ages and of all marital statuses.<sup>18</sup>

In the current analysis, an event was defined as having sex for the first time before ever having married. Individuals whose month of first sex was earlier

than their month of first marriage, or who had had sex but had not married by the time of interview, were considered to have experienced the event. Those who had had sex for the first time in the same month as (or after) their first marriage and those who had neither had sex nor married contributed their months of nonexperience of the event to the analysis and were “censored” at the time of marriage (for those who had married) or at the time of interview (for those who had not married), since they ceased to be at risk of the event at that point. I then calculated the proportion of individuals who had had premarital sex by each age, or event curves, using Kaplan-Meier life-table procedures.<sup>19</sup> For comparison, I also calculated proportions for the occurrence of sex (premarital or otherwise) and marriage.

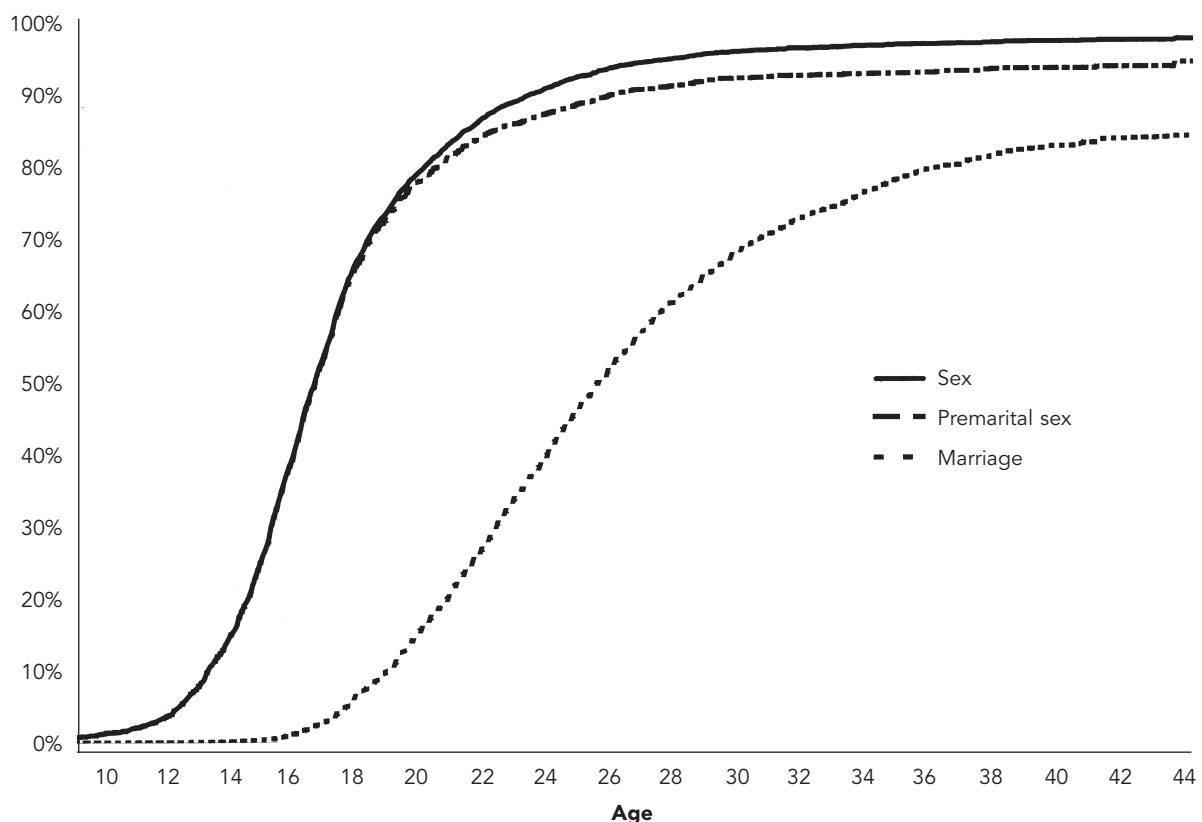
Event curves were first calculated for all male and female respondents (together and separately) in the 2002 NSFG. To better examine change over time, I used all four rounds of the NSFG to calculate separate curves for women only by 10-year age cohort, based on the year each person turned 15 and beginning with the 1954–63 cohort. Earlier cohorts have curves that

extend to older ages than later cohorts, since only individuals in the earlier cohorts have reached those later ages. Finally, in order to examine the behavior of those who abstained until *at least* a certain age, I calculated premarital sex proportions for the subsets of men and women in the 2002 NSFG who had not yet had sex by exact ages 15, 18, and 20.

## RESULTS

Figure 1 shows the proportion of individuals in the 2002 survey who had had sex, had premarital sex, and married by each age; the Table contains the proportion who had had premarital sex by specific ages for all respondents and by gender, as well as the median age at first premarital sex for various subgroups. By the exact age of 20 years, 77% of individuals had had sex, and 75% had had sex before marriage; 12% had married. By exact age 44, 99% of Americans had had sex, 95% had had sex before marriage, and 85% had married. At that age, 3.3% had abstained until marriage, and 1.3% had neither married nor had sex. Thus, 97% of those who had ever had sex had done

**Figure 1. Percent of individuals who had had sex, had premarital sex, and married by specific ages, 2002 National Survey of Family Growth**



**Table. Percentage of various groups who had had premarital sex by specific ages, and median age at first premarital sex**

Group	Age in 2002–2003 <sup>a</sup>	Percent who had had premarital sex by exact age:								Median age at first premarital sex
		15	18	20	25	30	35	40	44	
NSFG 2002 respondents										
All	15–44	16	58	75	89	93	94	95	95	17.4
Women	15–44	13	54	74	88	93	94	94	94	17.2
Men	15–44	20	60	77	89	93	94	95	96	17.6
Cohorts turning 15 in:										
1954–63	55–64	4	26	48	73	82	84	85	88	20.4
1964–73	45–54	6	39	65	86	91	93	93	94	18.6
1974–83	35–44	10	50	72	88	92	93	93	NA	18.0
1984–93	25–34	13	59	76	89	94	NA	NA	NA	17.3
1994–2003	15–24	14	54	74	NA	NA	NA	NA	NA	17.6
Those who abstained until at least exact age:										
15	15–44	NA	49	71	87	92	93	94	94	18.0
18	18–44	NA	NA	42	74	84	86	87	89	20.7
20	20–44	NA	NA	NA	54	72	75	78	81	24.1

<sup>a</sup>Fourteen percent of NSFG 2002 respondents were actually interviewed in 2003.

NA = not applicable

so premaritally at some point. Cox tests of equality<sup>20</sup> indicated that the likelihood of having sex *at all* did not differ significantly by gender. However, males were slightly more likely to have had *premarital* sex at virtually every age; by exact age 44, 96% of males and 94% of females had had premarital sex. Females were more likely to have married by each age, reflecting the fact that women typically marry at a younger age than men. It is important to note that although the overall marriage curve is included for comparison to the sex curves, the percent who had had premarital sex by a certain age cannot be calculated by taking the difference between the sex curve and the marriage curve at that age, because most of those who had both had sex and been married by that age had had sex first.

Figure 2 and the Table show premarital sex proportions using data from all four surveys (for women only) by 10-year cohort. The figure and table show a trend from the 1950s through the 1990s toward a higher proportion experiencing premarital sex: 48% of the cohort who turned 15 from 1954 to 1963 had done so by exact age 20, while 65% of the 1964–73 cohort, 72% of the 1974–83 cohort, and 76% of the 1984–93 cohort had done so. For the 1994–2003 cohort, 74% had had premarital sex by exact age 20, a figure between that of the 1974–83 and 1984–93 cohorts. The difference between the first cohort and subsequent ones was larger than later differences.

Among those born in the 1940s and turning 15 from 1954 to 1963, 82% had had premarital sex by exact

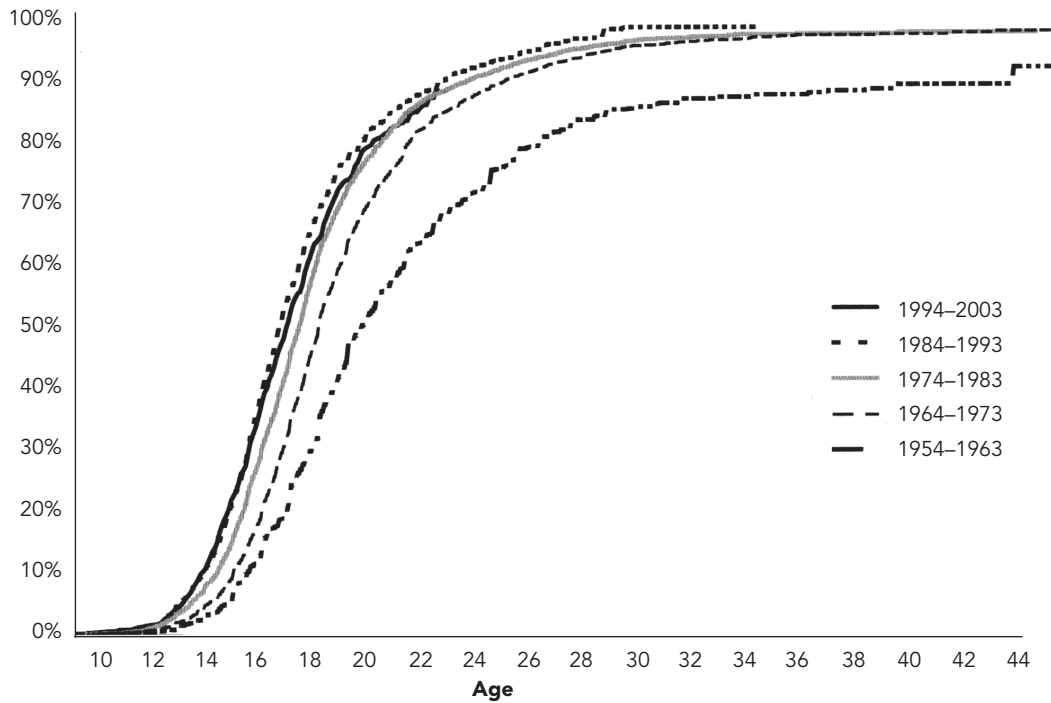
age 30, and 88% had done so by exact age 44; for more recent cohorts turning 15 from 1964 to 1993, at least 91% had done so by exact age 30. The youngest cohort had not yet reached age 30 by the time of the most recent survey. A Cox proportional-hazards regression model<sup>20</sup> including cohort as the only predictor indicated that the first four cohorts were significantly different from each other, but that the 1984–93 and the 1994–2003 cohorts were not significantly different (not shown). Figure 2 suggests that the vast majority of those who have premarital sex have done so by age 30.

Figure 3 and the Table show premarital sex proportions for those individuals (both male and female) in the 2002 NSFG who had not yet had sex by exact ages 15, 18, and 20. Ninety-four percent of those who abstained until at least age 15 and 89% of those who abstained until at least age 18 had had premarital sex by age 44. Even among the 28% of the population who had not had sex by age 20, 81% had had premarital sex by age 44.

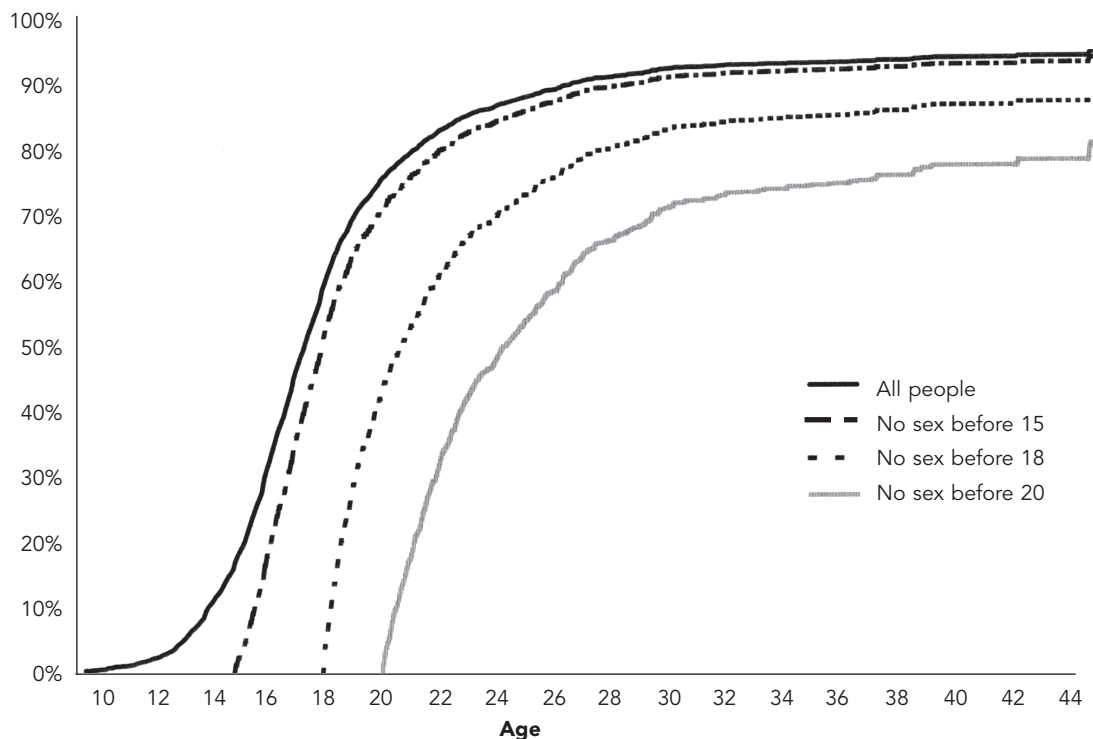
## DISCUSSION

The results of the analysis indicate that premarital sex is highly normative behavior. Almost all individuals of both sexes have intercourse before marrying, and the proportion has been roughly similar for the past 40 years. The slight decrease between the 1984–93 and 1994–2003 cohorts was not statistically significant. The increase seen beginning with the 1964–73 cohort

**Figure 2. Percent of women who had had premarital sex by specific ages, by decade turned 15. 1982, 1988, 1995, and 2002 cycles of the National Survey of Family Growth**



**Figure 3. Among those individuals who abstained until at least a certain age, percent who had had premarital sex by later ages, 2002 National Survey of Family Growth**



may be partly due to increased availability of effective contraception (in particular, the pill), which made it less likely that sex would lead to pregnancy;<sup>21</sup> but even among women who were born in the 1940s, nearly nine in ten had had premarital sex by age 44. Among those who did not have sex at all during their teen years, eight in ten eventually had premarital sex.

Premarital sex as normative behavior is not surprising in an era when men and women typically marry in their mid-to-late twenties. Indeed, not only is premarital sex nearly universal by age 30, but it is also very common at much younger ages. Evidence from the past 50 years suggests that establishing abstinence until marriage as normative behavior is a challenging policy goal. Instead, these findings argue for education and interventions that provide young people with the skills and information they need to protect themselves from unintended pregnancy and sexually transmitted diseases once they become sexually active.

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